FIG. 1

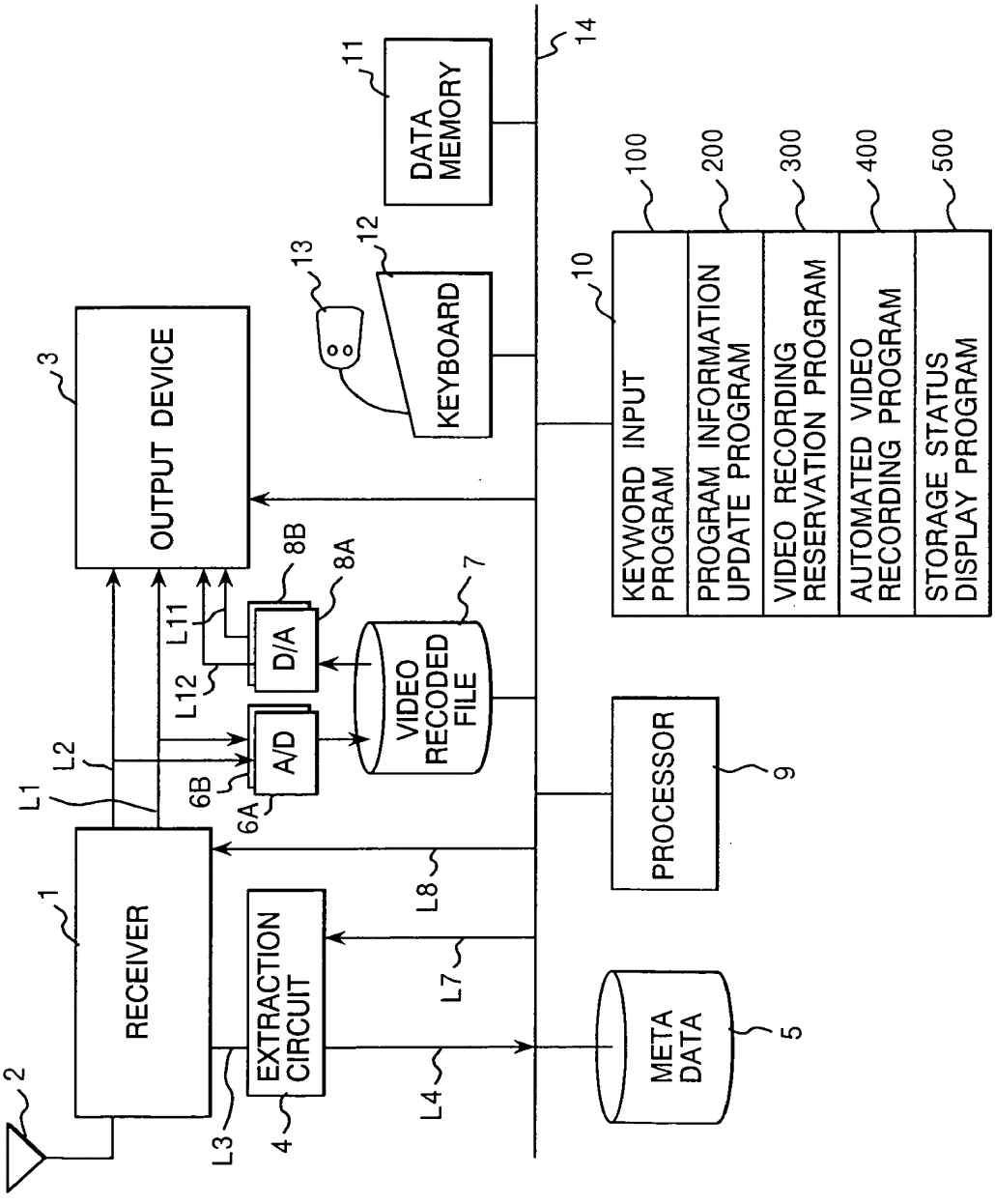

RECEIVER
1
2
L1
L2
L3
EXTRACTION CIRCUIT
4
L4
L7
L8
META DATA
5
PROCESSOR
9
10
OUTPUT DEVICE
3
L11
L12
D/A
8B
8A
A/D
6B
6A
VIDEO RECODED FILE
7
KEYBOARD
12
13
DATA MEMORY
11
14
KEYWORD INPUT PROGRAM
100
PROGRAM INFORMATION UPDATE PROGRAM
200
VIDEO RECORDING RESERVATION PROGRAM
300
AUTOMATED VIDEO RECORDING PROGRAM
400
STORAGE STATUS DISPLAY PROGRAM
500

FIG. 2

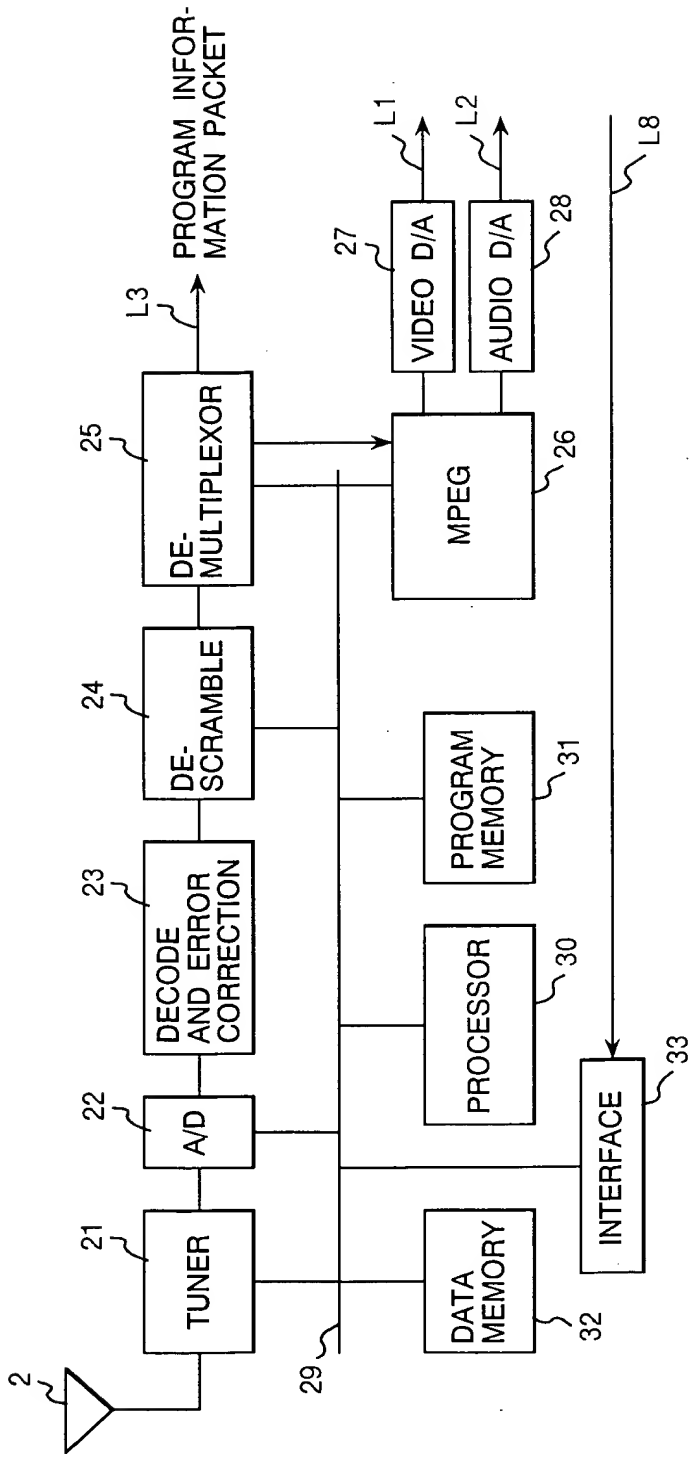

2
TUNER
21
A/D
22
DECODE AND ERROR CORRECTION
23
DE-SCRAMBLE
24
DE-MULTIPLEXOR
25
MPEG
26
VIDEO D/A
27
AUDIO D/A
28
PROGRAM MEMORY
31
PROCESSOR
30
DATA MEMORY
32
INTERFACE
33
29
L1
L2
L3
L8
PROGRAM INFORMATION PACKET

FIG. 3

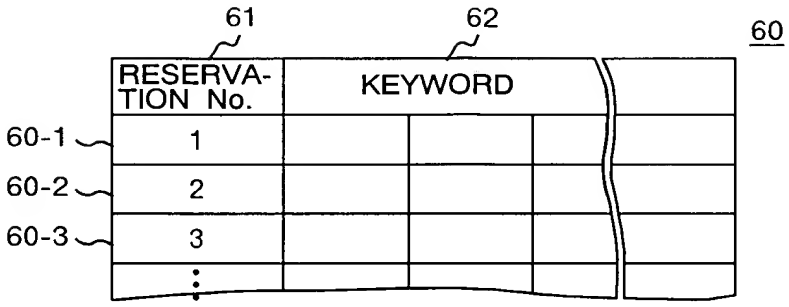

61
62
60
RESERVATION No.
KEYWORD
60-1
1
60-2
2
60-3
3

FIG. 4

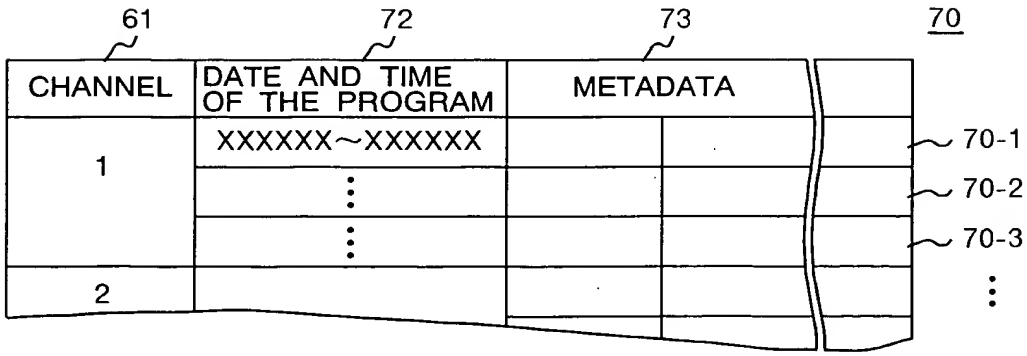

61
72
73
70
CHANNEL
DATE AND TIME OF THE PROGRAM
METADATA
1
XXXXXX~XXXXXX
2
70-1
70-2
70-3

FIG. 5

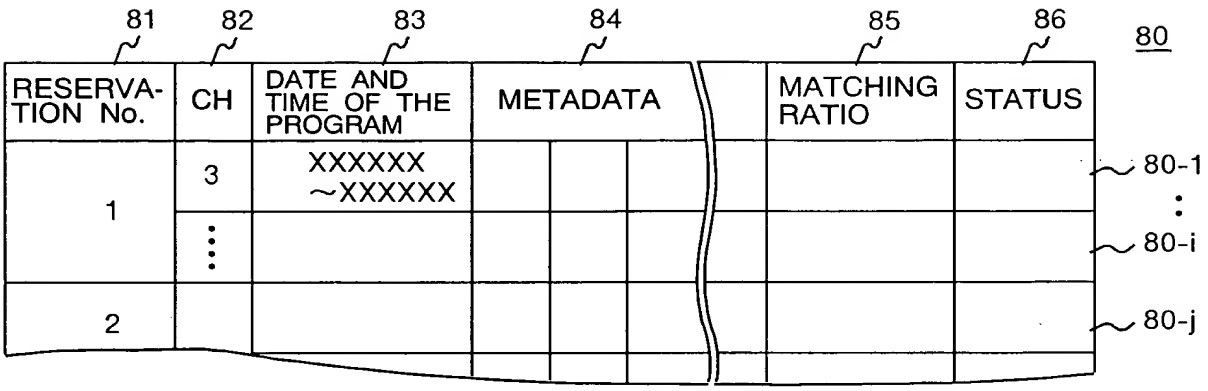

81
82
83
84
85
86
80
RESERVATION No.
CH
DATE AND TIME OF THE PROGRAM
METADATA
MATCHING RATIO
STATUS
1
3
XXXXXX ~XXXXXX
2
80-1
80-i
80-j

FIG. 6

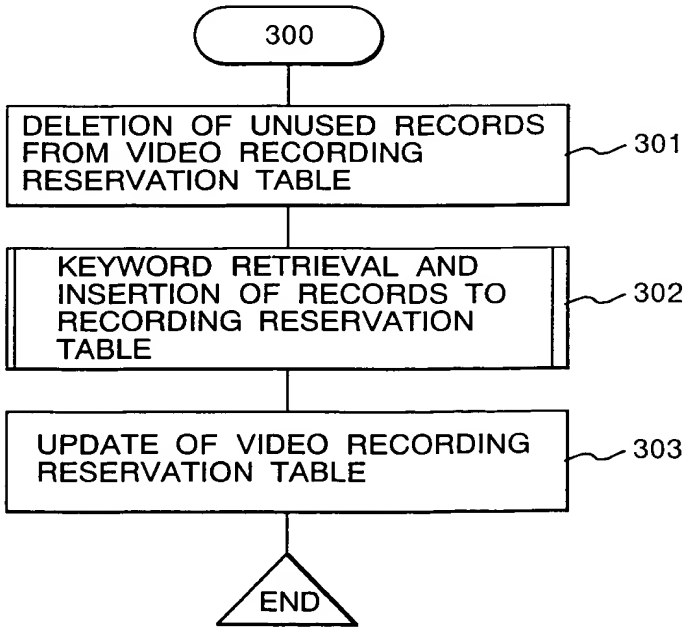

300
DELETION OF UNUSED RECORDS FROM VIDEO RECORDING RESERVATION TABLE
301
KEYWORD RETRIEVAL AND INSERTION OF RECORDS TO RECORDING RESERVATION TABLE
302
UPDATE OF VIDEO RECORDING RESERVATION TABLE
303
END

FIG. 7

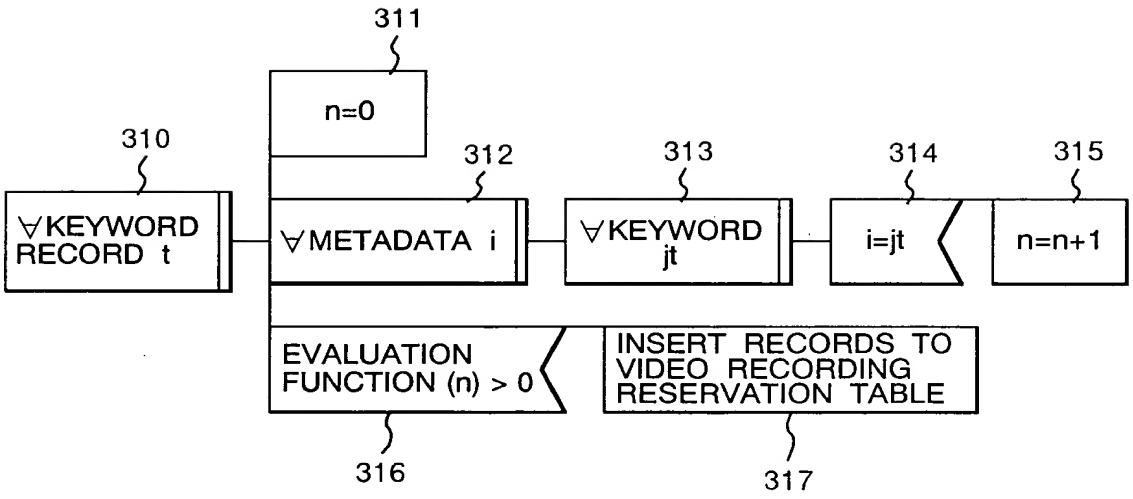

311
n=0
310
312
313
314
315
∀KEYWORD RECORD t
∀METADATA i
∀KEYWORD jt
i=jt
n=n+1
EVALUATION FUNCTION (n) > 0
INSERT RECORDS TO VIDEO RECORDING RESERVATION TABLE
316
317

FIG. 8

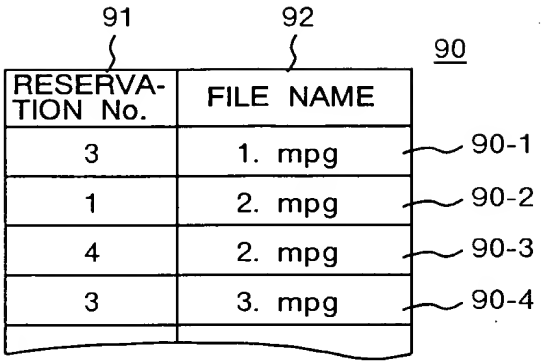

91
92
90
RESERVA-TION No.
FILE NAME
3
1. mpg
90-1
1
2. mpg
90-2
4
2. mpg
90-3
3
3. mpg
90-4

FIG. 9

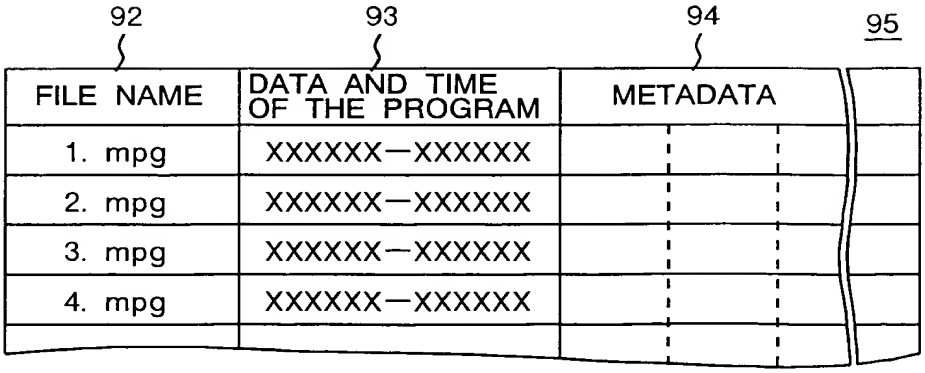

92
93
94
95
FILE NAME
DATA AND TIME OF THE PROGRAM
METADATA
1. mpg
XXXXXX—XXXXXX
2. mpg
XXXXXX—XXXXXX
3. mpg
XXXXXX—XXXXXX
4. mpg
XXXXXX—XXXXXX

FIG. 10

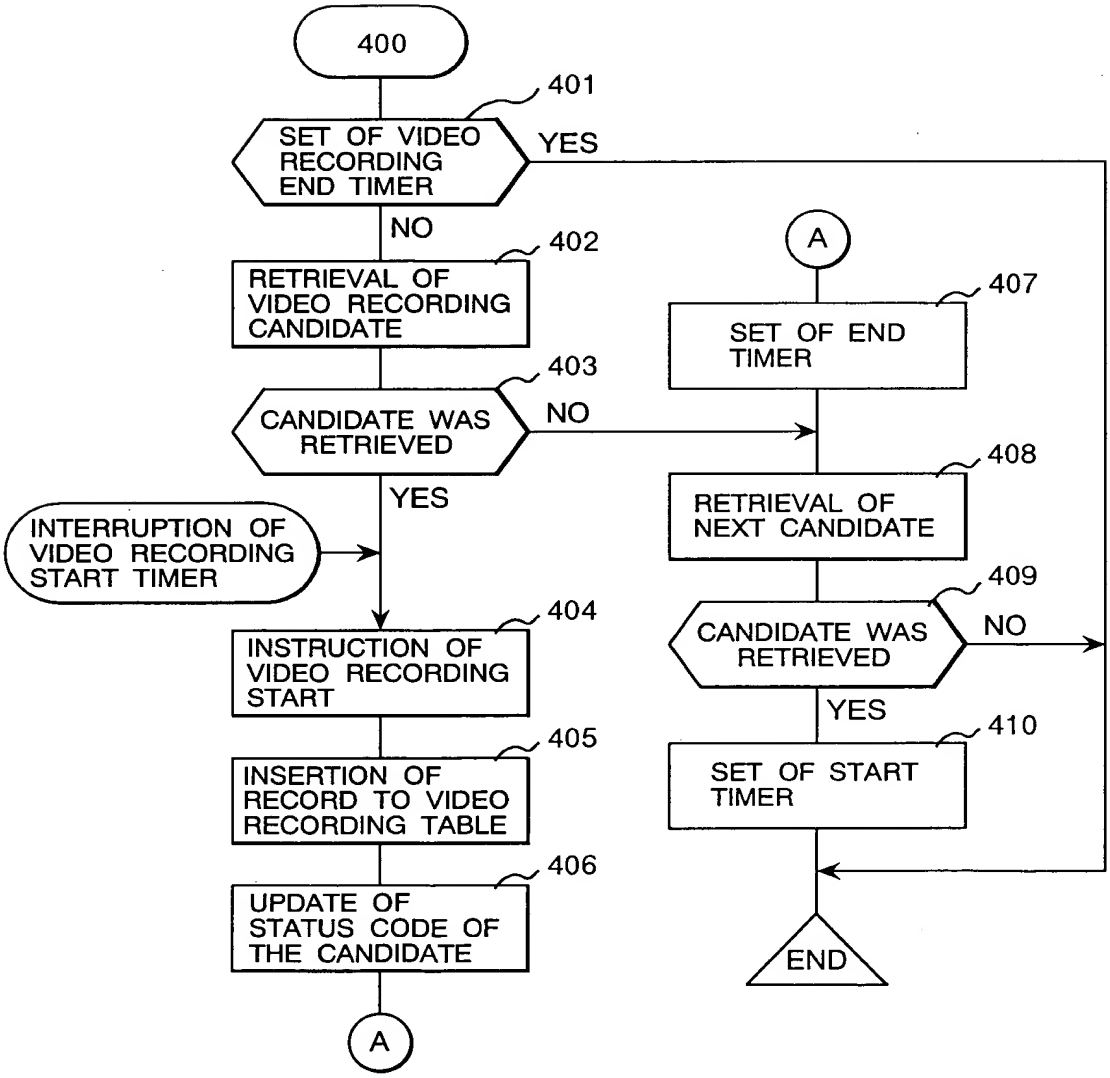

400
401
SET OF VIDEO RECORDING END TIMER
YES
NO
402
RETRIEVAL OF VIDEO RECORDING CANDIDATE
403
CANDIDATE WAS RETRIEVED
NO
YES
INTERRUPTION OF VIDEO RECORDING START TIMER
404
INSTRUCTION OF VIDEO RECORDING START
405
INSERTION OF RECORD TO VIDEO RECORDING TABLE
406
UPDATE OF STATUS CODE OF THE CANDIDATE
A
A
407
SET OF END TIMER
408
RETRIEVAL OF NEXT CANDIDATE
409
CANDIDATE WAS RETRIEVED
NO
YES
410
SET OF START TIMER
END

FIG. 11

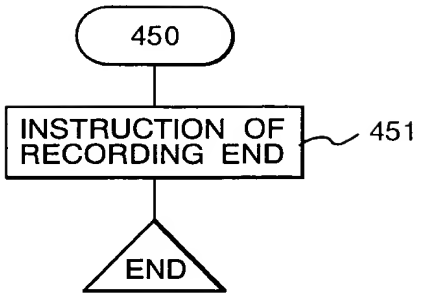


FIG. 12a

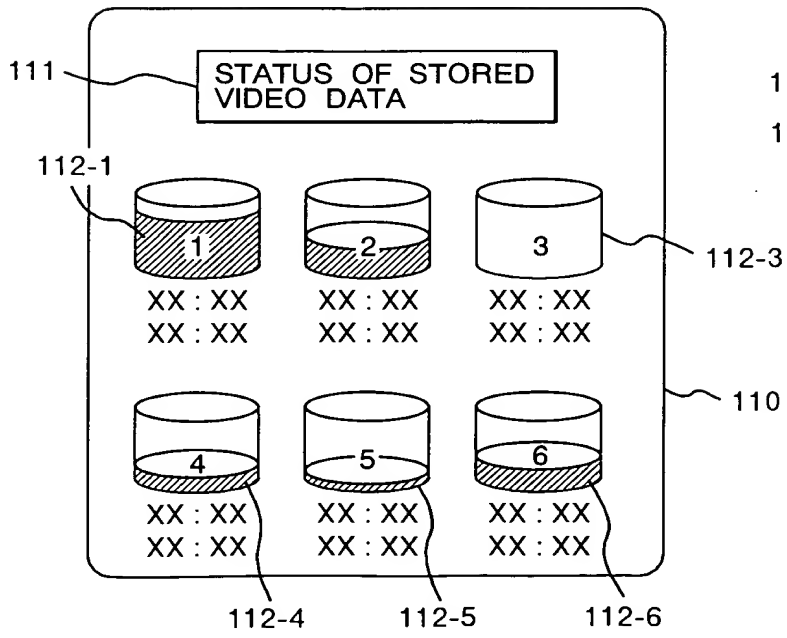


FIG. 12b

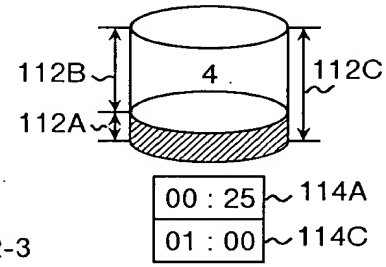


FIG. 13

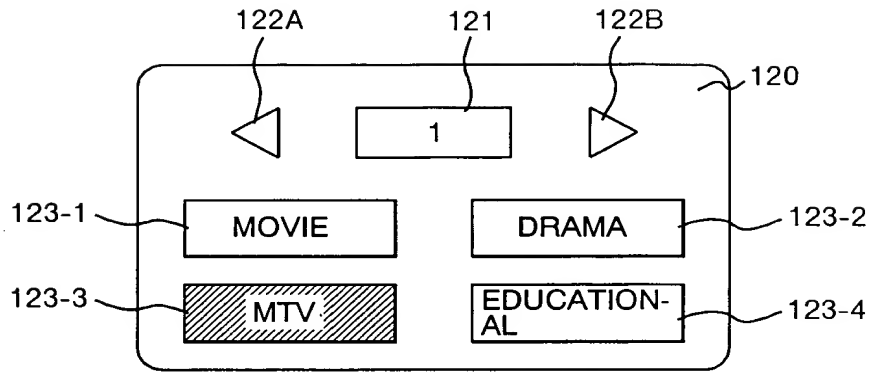
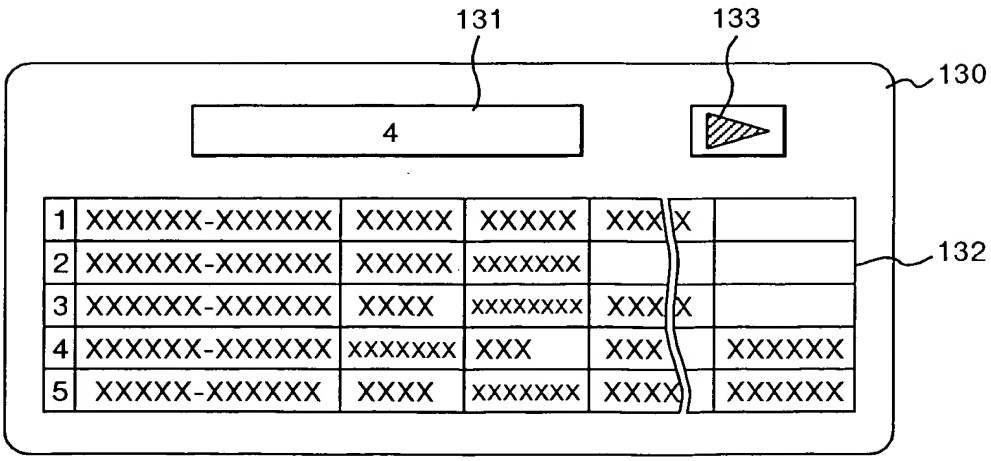

122A
121
122B
120
1
123-1
MOVIE
DRAMA
123-2
123-3
MTV
EDUCATION-AL
123-4

FIG. 14


131
133
130
4
1 XXXXXX-XXXXXX XXXXX XXXXX XXX X
2 XXXXXX-XXXXXX XXXXX xxxxxxx
3 XXXXXX-XXXXXX XXXX xxxxxxxx XXX X
4 XXXXXX-XXXXXX xxxxxxx XXX XXX XXXXXX
5 XXXXX-XXXXXX XXXX xxxxxxx XXXX XXXXXX
132